U.S.S.N.: 09/815,257

RESPONSE TO OFFICE ACTION

Page 2

1105 for any required fee.

Please amend the subject application as follows:

IN THE CLAIMS

Amend claims 1, 9, 17, 24, 27 and 33.

1. (AMENDED) A display device driving circuit which includes a scanning signal line driving section for outputting display scanning signals respectively to scanning signal lines for displaying an image according to the display data with respect to pixels which are disposed in a matrix,

said display device driving circuit comprising:

control means for switching, from successive output to simultaneous output, the output of the display scanning signals to the respective scanning signal lines based on a transition instruction signal that causes the transition from successive output to simultaneous output, and controlling the output of the display scanning signals from the scanning signal line driving section to the respective scanning signal lines based on the transition instruction signal, so that the display scanning signals are outputted simultaneously with respect to all scanning signal lines until next successive output is started by an instruction signal for successively outputting the display scanning signals.

9. (AMENDED) A display device driving circuit which includes a scanning signal line driving section for outputting display scanning signals respectively to scanning signal lines for displaying an image according to the display data with respect to pixels which are disposed in a

0

U.S.S.N.: 09/815,257

RESPONSE TO OFFICE ACTION

Page 3

matrix,

sard display device driving circuit comprising:

input means for receiving a transition instruction signal for causing a transition from successive output to simultaneous output with respect to the output of the display scanning signals to the respective scanning signal lines; and

control means for switching, from successive output to simultaneous output, the output of the display scanning signals to the respective scanning signal lines based on a transition instruction signal that causes the transition from successive output to simultaneous output, and controlling the scanning signal line driving section based on the transition instruction signal so that the display scanning signals are outputted simultaneously with respect to all scanning signal lines until next successive output is started by an instruction signal for successively outputting the display scanning signals.

17. (AMENDED) A driving method of a display device which outputs display scanning signals respectively to scanning signal lines, and outputs display data signals respectively to data signal lines, so as to display an image which is in accordance with the display data with respect to pixels which are disposed in a matrix, and has a partial display function for a non-image area and an image display area, said driving method comprising the step of:

simultaneously outputting the display scanning signals with respect to the plurality of scanning signal lines based on a transition instruction signal that causes a transition from successive

and

U.S.S.N.: 09/815,257

RESPONSE TO OFFICE ACTION

Page 4

Q3 umy output to simultaneous output, so that the display scanning signals are outputted simultaneously with respect to all scanning signal lines until next successive output is started by an instruction signal for successively outputting the display scanning signals.

24. (AMENDED) A driving method of a display device which outputs display scanning signals respectively to scanning signal lines, and outputs display data signals respectively to data signal lines, so as to display an image which is in accordance with the display data with respect to pixels which are disposed to a matrix, and has a partial display function for a non-image area and an image display area,

said method comprising the steps of:

distinguishing a predetermined display portion and a predetermined non-display portion from each other;

simultaneously outputting the display scanning signals and the display data signals according to the non-image area with respect to the respective scanning signal lines and the respective data signal lines which correspond to the non-image area, and

deactivating operation of the scanning signal line driving section until next display is carried

out.

27. (AMENDED) An image display device which includes a scanning signal line driving section for outputting display scanning signals respectively to scanning signal lines, a data signal

04

U.S.S.N.: 09/815,257

RESPONSE TO OFFICE ACTION

Page 5

line driving section for outputting display data signals respectively to data signal lines, so as to display an image according to the display data with respect to pixels which are disposed in a matrix, said pixels having a partial display function for an image display area and a non-image area, said image display device comprising:

scanning signal line control means for switching, from successive output to simultaneous output, the output of the display scanning signals to the respective scanning signal lines based on a transition instruction signal that causes the transition from successive output to simultaneous output, and controlling the output of the display scanning signals from the scanning signal line driving section to the respective scanning signal lines based on the transition instruction signal, so that the display scanning signals are outputted simultaneously with respect to all scanning signal lines until next successive output is started by an instruction signal for successively outputting the display scanning signals.

33. (AMENDED) An image display device which includes a scanning signal line driving section for outputting display scanning signals respectively to scanning signal lines, a data signal line driving section for outputting display data signals respectively to data signal lines, and a set section for setting an image display area according to the display data and a non-display area with respect to pixels, so as to display an image according to the display data with respect to the pixels which are disposed in a matrix,

said image display device comprising:



U.S.S.N.: 09/815,257

RESPONSE TO OFFICE ACTION

Page 6

scanning signal line control means for controlling the scanning signal line driving section so that the display scanning signals are simultaneously outputted with respect to the respective scanning signal lines which correspond to the non-image area as set by the set section,

the scanning signal line driving section including a plurality of serially connected shift register sections for outputting the display scanning signals respectively to the scanning signal lines, and

the scanning signal line control means individually and simultaneously scanning the shift register sections in the non-image area.

Add new claims 40-43 that read as follows:

40. (ADDED) The method as set forth in claim 17, wherein the display scanning signals are outputted based on the transition instruction signal simultaneously to an odd-numbered line group of the scanning signal lines that correspond to an unscanned area and simultaneously to an even-numbered line group of the scanning signal lines that correspond to the unscanned area.

41. (ADDED) The method as set forth in claim 17, wherein the display scanning signals are outputted based on the transition instruction signal simultaneously to odd-numbered pairs of adjacent ones of the scanning signal lines that correspond to an unscanned area and simultaneously to even-numbered pairs of adjacent ones of the scanning signal lines that correspond to the unscanned area.

06

U.S.S.N.: 09/815,257

RESPONSE TO OFFICE ACTION

Page 7

43. (ADDED) A display device driving circuit which includes a scanning signal line driving section for outputting display scanning signals respectively to scanning signal lines for displaying an image according to the display data with respect to pixels which are disposed in a matrix, said display device driving circuit comprising:

deactivating means for deactivating operation of the scanning signal line driving section based on a synchronize\signal for image display and based on a transition instruction signal; and control means for switching, from successive output to simultaneous output, the output of the display scanning signals to the respective scanning signal lines based on a transition instruction signal for causing the transition from successive output to simultaneous output, and controlling the output of the display scanning signals from the scanning signal line driving section to the respective scanning signal lines based on the transition instruction signal, so that the display scanning signals are outputted simultaneously within one horizontal period or two horizontal periods with respect to all scanning signal lines until next scanning is started.

43. (ADDED) A driving method of adisplay device which outputs display scanning signals respectively to scanning signal lines, and outputs display data signals respectively to data signal lines, so as to display an image which is in accordance with the display data with respect to pixels which are disposed in a matrix, the display device having a partial display function for a nonimage area and an image display area, horizontal signal lines in a vertical period of the display